IN THE CLAIMS

Please cancel claims 1-75 without prejudice or disclaimer.

Please add claims 76-99 as indicated below.

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-75 (cancelled)

1   Claim 76 (new) A method for detecting a dead gateway comprising the steps of:

2   sending a first Transmission Control Protocol (TCP) packet of data from an

3   application of a sender host to a receiver host through a first gateway;

4   failing to receive an acknowledgment of received data from said receiver host;

5   deleting an Address Resolution Protocol (ARP) entry associated with said first

6   gateway in said sender host; and

7   sending an ARP request to said first gateway upon deletion of said ARP entry;

8   wherein if a response to said ARP request is not received from said receiver

9   host, then said first gateway is inoperative.

1   Claim 77 (new) The method as recited in claim 76 further comprising the step of:

2   selecting an alternative path to send a packet of data from said sender host to

3   said receiver host through a second gateway in a routing table in said sender host if

4   said response to said ARP request is not received from said receiver host.

1   Claim 78 (new) The method as recited in claim 77 further comprising the step of:

2   marking routes that use said first gateway to a lower priority level from an

3   original priority level in said routing table in said sender host.

1   Claim 79 (new) The method as recited in claim 78, wherein said routes that use said

2   first gateway return to their original priority level after a duration of time.

1   Claim 80 (new) The method as recited in claim 77 further comprising the step of:

2   sending a non-TCP packet of data to said receiver host through said second

3   gateway using said alternative gateway.

1   Claim 81 (new) The method as recited in claim 77 further comprising the step of:

2   sending a second TCP packet of data to said receiver host through said second

3   gateway using said alternative gateway.

1   Claim 82 (new) The method as recited in claim 76, wherein if a response to said ARP

2   request is received from said receiver host, then said first gateway is operative.

1   Claim 83 (new) The method as recited in claim 82 further comprising the step of:

2   sending one of a TCP and a non-TCP packet of data through said first

3   gateway.

1   Claim 84 (new) A computer program product embodied in a machine readable

2   medium for detecting a dead gateway comprising the programming steps of:

3   sending a Transmission Control Protocol (TCP) packet of data from an

4   application of a sender host to a receiver host through a first gateway;

5   failing to receive an acknowledgment of received data from said receiver host;

6   deleting an Address Resolution Protocol (ARP) entry associated with said first

7   gateway in said sender host; and

8   sending an ARP request to said first gateway upon deletion of said ARP entry;

9   wherein if a response to said ARP request is not received from said receiver

10   host, then said first gateway is inoperative.

1   Claim 85 (new) The computer program product as recited in claim 84 further

2   comprising the programming step of:

3   selecting an alternative path to send a packet of data from said sender host to

4   said receiver host through a second gateway in a routing table in said sender host if

5   said response to said ARP request is not received from said receiver host.

1   Claim 86 (new) The computer program product as recited in claim 85 further

2   comprising the programming step of:

3   marking routes that use said first gateway to a lower priority level from an

4   original priority level in said routing table in said sender host.

1   Claim 87 (new) The computer program product as recited in claim 86, wherein said

2   routes that use said first gateway return to their original priority level after a duration

3   of time.

1   Claim 88 (new) The computer program product as recited in claim 85 further

2   comprising the programming step of:

3   sending a non-TCP packet of data to said receiver host through said second

4   gateway using said alternative gateway.

1   Claim 89 (new) The computer program product as recited in claim 85 further

2   comprising the programming step of:

3   sending a second TCP packet of data to said receiver host through said second

4   gateway using said alternative gateway.

1   Claim 90 (new) The computer program product as recited in claim 84, wherein if a

2   response to said ARP request is received from said receiver host, then said first

3   gateway is operative.

1   Claim 91(new) The computer program product as recited in claim 90 further

2   comprising the programming step of:

3   sending one of a TCP and a non-TCP packet of data through said first

4   gateway.

1   Claim 92 (new) A system, comprising:

2   a processor; and

3   a memory unit coupled to said processor, wherein said memory unit is

4   operable for storing a computer program for detecting a dead gateway;

5   wherein said processor, responsive to said computer program, comprises:

6   circuitry for sending a Transmission Control Protocol (TCP) packet of data

7   from an application of a sender host to a receiver host through a first gateway;

8   circuitry for failing to receive an acknowledgment of received data from said

9   receiver host;

10   circuitry for deleting an Address Resolution Protocol (ARP) entry associated

11   with said first gateway in said sender host; and

12   circuitry for sending an ARP request to said first gateway upon deletion of

13   said ARP entry;

14   wherein if a response to said ARP request is not received from said receiver

15   host, then said first gateway is inoperative.

1   Claim 93 (new) The system as recited in claim 92, wherein said processor further

2   comprises:

3   circuitry for selecting an alternative path to send a packet of data from said

4   sender host to said receiver host through a second gateway in a routing table in said

5   sender host if said response to said ARP request is not received from said receiver

6   host.

1   Claim 94 (new) The system as recited in claim 93, wherein said processor further

2   comprises:

3   circuitry for marking routes that use said first gateway to a lower priority level

4   from an original priority level in said routing table in said sender host.

1   Claim 95 (new) The system as recited in claim 94, wherein said routes that use said

2   first gateway return to their original priority level after a duration of time.

1   Claim 96 (new) The system as recited in claim 93, wherein said processor further

2   comprises:

3   circuitry for sending a non-TCP packet of data to said receiver host through

4   said second gateway using said alternative gateway.

1   Claim 97 (new) The system as recited in claim 93, wherein said processor further

2   comprises:

3   circuitry for sending a second TCP packet of data to said receiver host through

4   said second gateway using said alternative gateway.

1   Claim 98 (new) The system as recited in claim 92, wherein if a response to said ARP

2   request is received from said receiver host, then said first gateway is operative.

1   Claim 99 (new) The system as recited in claim 98, wherein said processor further

2   comprises:

3   circuitry for sending one of a TCP and a non-TCP packet of data through said

4   first gateway.